

Notice of Allowability

Application No.

09/513,518

Examiner

Kevin Mew

Applicant(s)

ALEXANDER ET AL.

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/19/2007.
2. ☒ The allowed claim(s) is/are 39, 42, 47, 50, 53-55, 58-60, 65 and 68, which have been renumbered as claims 1-12, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 21.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

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Detailed Action

Response to Amendment

1. Applicant's Remarks/Arguments filed on 8/19/2007 regarding claims 39, 42, 47, 50, 53-55, 58-60, 65 and 68 have been fully considered. Claims 1-38, 40-41, 43-46, 48-49, 51-52, 56-57, 61-64, 66-67 have been canceled by applicant.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Robert Voigt on 10/23/2007.

The application has been amended as follows on the seven three pages:

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Claim 39. (Currently Amended) A network switch comprising:

a CPU;

a memory system having circuitry operable to attach to the CPU;

a switch fabric system having circuitry operable to attach to the CPU;

a port controller having circuitry operable to attach to the switch fabric

system;

a software application operable to execute on the CPU;

a Forwarding Database Distribution Library (FDDL) system operable to execute on the CPU;

a switch device driver operable to execute on the CPU; and

a second software application operable to execute on the CPU, wherein the second software application communicates with the FDDL system;

wherein the software application is operable to communicate with the FDDL system, the FDDL system is operable to communicate with the switch device driver, and the switch device driver is operable to communicate with the switch fabric;

wherein the FDDL system comprises:

a base FDDL system;

a software application tower FDDL system; and

a second software application tower FDDL system wherein the base FDDL system

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communicates with the switch device driver, the software application communicates with the software application tower FDDL system, the second software application communicates with the second software application tower FDDL system, and the base FDDL system communicates with the software application tower FDDL system and the second software application tower FDDL system.

Claim 42. (Currently Amended) A network switch comprising:

a CPU;

a memory system having circuitry operable to attach to the CPU;

a switch fabric system having circuitry operable to attach to the CPU;

a port controller having circuitry operable to attach to the switch fabric

system;

a software application operable to execute on the CPU;

a Forwarding Database Distribution Library (FDDL) system operable to execute on the CPU;

a switch device driver operable to execute on the CPU;

an independent software application operable to execute on the CPU;

an independent software application shim operable to execute on the CPU;

wherein the software application is operable to communicate with the FDDL system, the

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FDDL system is ~~operable~~ to communicate with the switch device driver, and the switch device driver is ~~operable~~ to communicate with the switch fabric;

wherein the independent software application communicates with the independent software application shim and the independent software application shim communicates with the switch device driver; and

wherein the FDDL system comprises:

a base FDDL system;

a software application tower FDDL system; and

a second software application tower FDDL system

wherein the base FDDL system communicates with the switch device driver, the software application communicates with the software application tower FDDL system, the second software application communicates with the second software application tower FDDL system, and the base FDDL system communicates with the software application tower FDDL system and the second software application tower FDDL system.

Claim 47. (Currently Amended) A network switch comprising:

a CPU;

a memory system having circuitry ~~operable~~ to attach to the CPU,

a switch fabric system having circuitry ~~operable~~ to attach to the CPU;

a port controller having circuitry ~~operable~~ to attach to the switch fabric

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system;

a protocol means for providing a service to a network system;

a Forwarding Database Distribution Library (FDDL) means for communicating with the protocol means;

a switch device driver means for communicating with the FDDL means and the port controller; and

a second protocol means for providing a second service to the network system, wherein the FDDL means communicates with the second protocol means;

wherein the FDDL means comprises:

a base FDDL means for communicating with the switch device driver means;

a protocol tower FDDL means for communicating with the protocol means and the base FDDL means; and

a second protocol tower FDDL means for communicating with a second protocol means and the base FDDL means.

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Claim 50. (Currently Amended) A network switch comprising:

a CPU;

a memory system having circuitry operable to attach to the CPU;

a switch fabric system having circuitry operable to attach to the CPU;

a port controller having circuitry operable to attach to the switch fabric system;

a protocol means for providing a service to a network system;

a Forwarding Database Distribution Library (FDDL) means for communicating with the protocol means;

a switch device driver means for communicating with the FDDL means and the port controller;

an independent protocol means for providing an independent service to the network system; and

an independent protocol shim for communicating with the independent protocol means and the switch device driver means;

wherein the FDDL means comprises:

a base FDDL means for communicating with the switch device driver means;

a protocol tower FDDL means for communicating with the protocol means and the base FDDL means; and

a second protocol tower FDDL means for communicating with the second protocol means and the base FDDL means.

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Claim 65. (Currently Amended) A network system comprising:

a network switch comprising a CPU, a memory system having circuitry operable to attach to the CPU, a switch fabric system having circuitry operable to attach to the CPU a port controller having circuitry operable to attach to the switch fabric system, a software application operable to execute on the CPU, a Forwarding Database Distribution Library (FDDL) system operable to execute on the CPU, and a switch device driver operable to execute on the CPU, wherein the software application is operable to communicate with the FDDL system, the FDDL system is operable to communicate with the switch device driver, and the switch device driver is operable to communicate with the switch fabric;

a backbone;

a workstation; and

a second software application operable to execute on the CPU, wherein the second software application communicates with the FDDL system;

wherein the workstation is logically connected to the backbone,

wherein the backbone is logically connected to the port controller of the network switch; and

wherein the FDDL system comprises:

a base FDDL system;

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a software application tower FDDL system; and

a second software application tower FDDL system wherein the base FDDL system communicates with the switch device driver, the software application communicates with the software application tower FDDL system, the second software application communicates with the second software application tower FDDL system, and the base FDDL system communicates with the software application tower FDDL system and the second software application tower FDDL system.

Claim 68 (Currently Amended) A network system comprising:

a network switch comprising a CPU, a memory system having circuitry operable to attach to the CPU, a switch fabric system having circuitry operable to attach to the CPU a port controller having circuitry operable to attach to the switch fabric system, a software application operable to execute on the CPU, a Forwarding Database Distribution Library (FDDL) system operable to execute on the CPU, and a switch device driver operable to execute on the CPU, wherein the software application is operable to communicate with the FDDL system, the FDDL system is operable to communicate with the switch device driver, and the switch device driver is operable to communicate with the switch fabric;

a backbone;

a workstation,

an independent software application operable to execute on the CPU;

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an independent software application shim operable to execute on the CPU;

wherein the workstation is logically connected to the backbone, wherein the backbone is logically connected to the port controller of the network switch;

wherein the independent software application communicates with the independent software application shim and the independent software application shim communicates with the switch device driver; and

wherein the FDDL system comprises:

a base FDDL system;

a software application tower FDDL system; and

a second software application tower FDDL system

wherein the base FDDL system communicates with the switch device driver, the software application communicates with the software application tower FDDL system, the second software application communicates with the second software application tower FDDL system, and the base FDDL system communicates with the software application tower FDDL system and the second software application tower FDDL system.

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance:

The present application relates to providing a network switch and a method for providing communications over a network system, the network switch includes the unique functions of:

“a Forward Database Distribution Library (FDDL) system to execute on the CPU;

wherein the FDDL system comprises:

a base FDDL system;

a software application tower FDDL system; and

a second software application tower FDDL system wherein the base FDDL system communicates with the switch device driver, the software application communicates with the software application tower FDDL system, the second software application communicates with the second software application tower FDDL system, and the base FDDL system communicates with the software application tower FDDL system and the second software application tower FDDL system.”

The closest prior art, Kumar et al. (USP 5,970,069), discloses a network switch that comprises a switch fabric system, CPU, DRAM, Flash ROM, port controller and software applications and a switch device driver. However, Kumar fails to anticipate or render obvious the above quoted limitations of the present application. This renders the claims allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 571-272-3141. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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